

ACTIVITY 4 GRADES 6-12

Objective

Students will locate and map the area where they attend school, showing any presence of purple loosestrife.

(Students can map other invasive wetland plants if no purple loosestrife occurs in your area.)

Time Suggestion

One initial class period, homework, and later time to review homework. (Best done very early in the school year when loosestrife is blooming.)

Wisconsin Model Environmental Education and Science Standards

Environmental Education:
A.4.1, A.4.2, A.8.4, C.8.2, E.12.3.

Science: C.8.8.

IS OUR SCHOOL IN LOOSESTRIFE LAND?*

DESCRIPTION

Students locate stands of purple loosestrife near their school or other study area.

PROBLEM

Is purple loosestrife a problem in our area?

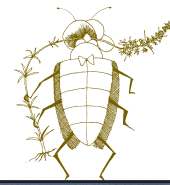
MATERIALS

- ☐ Drafting supplies: rulers, pens, pencils, drawing paper.
- ☐ Local area maps, perhaps from county plat maps, U.S.G.S. topographic maps, the *Wisconsin Atlas and Gazetteer* (Yarmouth, Maine: DeLorme Publishing), etc. Go to <http://dnr.wi.gov/topic/wetlands/mapping.html> and click on "Surface Water Data Viewer" for a map of state wetlands you can print. Scroll to your area, click the "Wetlands" box, and click "Print."
- ☐ See current known locations of loosestrife at <http://maps.glifwc.org/>: on the left, click boxes for Invasive Species, Occurrence, AIS and Purple Loosestrife. Consider adding roads or base layers, such as Google Hybrid photos, and printing a map. For possible additional sites, email Jason.Granberg@wisconsin.gov.
- ☐ Pictures of purple loosestrife and native look-a-like plants. See brochure at <http://clean-water.uwex.edu/pubs/pdf/purple.pdf>.

PROCEDURES

1. Student teams draw a map of a small area near their school or home(s) that includes a wetland(s), road ditches, or flower gardens. Maps should include roads, buildings and other landmarks. Maps should include a clear scale and legend.
2. As homework, teams search their areas looking for purple loosestrife and adding any sites they have found to their maps. (Students should avoid private property.)
3. Have the students compile all of the purple loosestrife data from their maps onto at least two maps that show the collective area that the entire class surveyed.





ACTIVITY 4 IS OUR SCHOOL IN LOOSESTRIFE LAND? (CONTINUED)

- Students compare loosestrife locations they have found with known location maps to identify any new sites. Report new loosestrife sites to Jason.Granberg@wisconsin.gov, and consider possible biocontrol work on them!
- Assign older students to contact landowners who have sites with purple loosestrife to provide them with information on this exotic, invasive species. Perhaps hand out the purple loosestrife brochure (see “Materials” above).

BACKGROUND INFORMATION

The brochure given above contains a map of Wisconsin showing purple loosestrife locations in the mid-1980s. Loosestrife was spreading rapidly then and taking over many native wetlands. Since then, biological control has been helping to reduce loosestrife plant size and limit its spread. But many sites—especially unknown sites—are still without biocontrol insects and remain uncontrolled with stems often six to eight feet tall that shade out native plants. Adding control beetles usually reduces both seed output and plants heights, allowing native plants to compete well.

It is critical that someone in every area learn about where the plant is invading wetlands. That’s a project you and students can undertake that would be both a great exercise in mapping and useful in local management. In fact, any sites you locate can and should be added to the web-site database. Knowing about your sites also lays groundwork for local control efforts, which you can begin by rearing and releasing biological control beetles with your students.

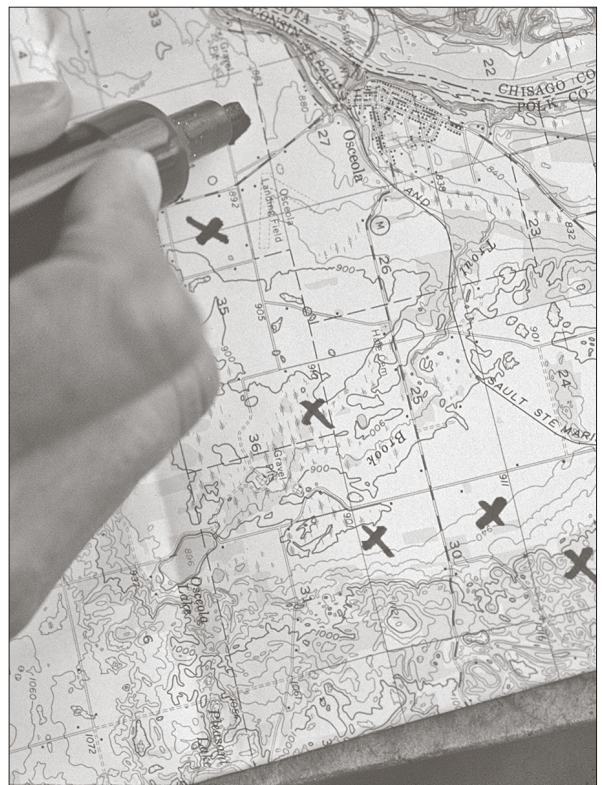
STUDENT ASSESSMENT

Evaluate the students’ drawings by making sure that each map has a clear scale and legend that includes each type of feature shown on the map. Evaluate each drawing’s accuracy by comparing it to the professional maps that the class uses.

Have students use the scales on the different maps to estimate how far away from the school or their homes purple loosestrife is growing.



D BLUMER



R QUEEN

Purple loosestrife often can be found near our homes and schools. Mapping the location of loosestrife raises awareness of this invasive plant.

* Revised with permission from “Is Purple Loosestrife a Problem Near Our School?” in *The Purple Loosestrife Project Cooperator’s Handbook*.